

Air-Mindedness

The Core of Successful Air Enterprise Development

Maj Chris Wachter, USAF

The Air Force is the great developing power in the world today. It offers not only the hope of increased security at home, but, also, on account of its speed of locomotion, of the greatest civilizing element in the future, because the essence of civilization is rapid transportation.

—Brig Gen William “Billy” Mitchell, 1925

When Billy Mitchell, the father of American airpower, commented on the importance of the Air Force, America was at an inflection point. Barely 20 years old, the aircraft had already been put to use in a wide variety of ways. Virtually every type of military mission that airplanes could fly was tested in the first years they saw combat during World War I.¹ Even so, seven years after Mitchell led the largest formation of US military planes over Château-Thierry, he wrote a book called *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military*.² As much as he wanted America to have a strong military air force, he realized that the viability of that force was irrevocably tied to the economic well-being of a nation. In order to establish strong and enduring airpower, society needed to become “air-minded,” acknowledging the advances in transportation, communication, commerce, and governance that the use of air could bring to the nation. In essence Mitchell understood that a strong aviation enterprise represented the keystone for the future strength of American economy and defense.

In today’s environment, the United States conducts security cooperation efforts to build partnerships and partner capacity in an attempt to

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE JAN 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE Air-Mindedness: The Core of Successful Air Enterprise Development				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Headquarters US Air Force, Irregular Warfare Concepts Branch, Washington, DC, 20301				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 10	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

“further the U.S. objective of securing a peaceful and cooperative international order.”³ To prove successful in this strategy, the US Air Force must demonstrate to partner nations how developing a strong aviation enterprise lays the foundation for the economic and security benefits that airpower can provide.

The American Airpower Narrative

In the early 1920s and 30s, American society had to make a conscious decision regarding the “aeroplane.” That is, should the United States embrace “air-mindedness” and expand its forays into the advancement of aviation—the choice of many developed countries in Europe—or should America continue to rely on the strength of its Navy and its relative isolation from the rest of the world for prosperity and defense? Despite post-World War I retrenchment on military budgets and the economic depression, the promise of general aviation captured Americans’ imagination. Our aviation enterprise blossomed as inspired by Mitchell’s activism.

Mitchell noted that “those interested in the future of the country, not only from a national defense standpoint but from a civil, commercial, and economic one as well, should study this matter [the organization of aviation in a country] carefully, because airpower has not only come to stay but is, and will be, a dominating factor in the world’s development.”⁴ He intended that the term *airpower* be used in reference to defense *and* civil aviation, a marked difference from its present usage, which refers solely to military force in and from the air. Mitchell had a much simpler concept of airpower: “The ability to do something in or through the air.”⁵ He considered it necessary for a nation to possess airpower if it wished to advance as a civilization. Although Mitchell certainly held that airpower would reach its pinnacle through bombers and pursuit aircraft capable of defending the United States, he also well understood the importance of a strong, nationwide infrastructure and a populace willing to support the country’s aviation enterprise.

In much of his early writings, Mitchell described the possible advantages a strong aviation backbone could provide to society. He focused on airpower's unique characteristics—its circumvention of geography and unmatched speed—to link it directly to improvements in communication, commerce, and governance. Mitchell saw airpower not only as revolutionary but also as requisite to the advancement of our civilization in the nascent globalized environment.

Mitchell may indeed have merited the often-applied label “the prophet of airpower” because he had to convince the US population of the advantages of a still-developing enterprise. But the fact remains that our nation has adopted a sense of air-mindedness and that in the past 90 years, we have enjoyed more security, stability, and success both inside and outside our borders, thanks to airpower. Today we easily fly cross-country to visit friends and relatives, we order goods delivered the next day to our door, and our elected officials conduct business in our nation's capital and respond to their constituents' needs at home, all thanks to aviation. In short we travel swiftly, communicate, and conduct business, thanks to our robust, integrated, and reliable aviation enterprise. Mitchell foresaw these benefits and tied them directly to advantages in national defense as well:

We may confidently expect that, when a system of airdromes is established through the country, and proper rules for the regulation of aircraft have been prescribed by law and are well administered, which will guarantee to the public safe transit through the air; when we have developed suitable types of aircraft essentially for commercial purposes, we shall see a greater development of commercial aviation. . . . We must remember that, as we develop our commercial power in the air, just so much more do we develop our means of national defense.⁶

We need a bottom-up approach to creating the capacity for developing partner nations to use aviation for these purposes long before we can reasonably expect those countries to employ higher-cost, higher-technology elements of combat airpower to preserve their own national security.

Aviation Enterprise Development

The forthcoming Air Force air-advising operating concept defines “aviation enterprise” as “the sum total of all air domain resources, processes, and culture, including personnel, equipment, infrastructure, operations, sustainment, and air-mindedness.”⁷ Despite the references to aviation enterprise development (AED) as a concept, we might do better to consider it a holistic approach to discussing and institutionalizing airpower in a particular nation-state. As such, AED offers a strategic narrative for how the Air Force, joint community, and other inter-agency players integrate to assist partner nations in building capable, enduring aviation capability and capacity.

The impetus for this AED narrative has firm roots in US strategic guidance. One of the primary US national security interests lies in building partner capacity. The national security strategy of 2010 highlights the fact that foreign instabilities can have global effects which may directly threaten the American people: “To advance our common security, we must address the underlying political and economic deficits that foster instability, enable radicalization and extremism, and ultimately undermine the ability of governments to manage threats within their borders and to be our partners in addressing common challenges.”⁸ Similarly, according to the national defense strategy of 2008, “The most important military component of the struggle against violent extremists is not the fighting we do ourselves, but how well we help prepare our partners to defend and govern themselves.”⁹

When it comes to airpower, however, transferring our advanced aviation capability to developing nations does not come easily. Taking a page from Mitchell’s model, the Air Force has identified the need to foster the aviation enterprise in these developing nations prior to integrating high-end capabilities. In 2009 Gen Norton Schwartz, the Air Force chief of staff, chartered an irregular warfare (IW) “tiger team” that assessed the service’s current capabilities against the backdrop of the threat environment. Team members adopted the fundamental operating premise that “the security, stability, and economic develop-

ment of a nation in the early 21st century are inextricably linked to its aviation resource capacity and capability.”¹⁰ This statement does not differ substantially from the one Billy Mitchell made about the development of US aviation almost 90 years ago: “As transportation is the essence of civilization, aviation furnishes the quickest and most expeditious means of communication that the world has ever known. . . . The future of our nation is indissolubly bound up in the development of air power.”¹¹ The tiger team found that “countries employing high-end aviation largely represent the developed or rapidly developing world. They have strong local economies, and are adequately performing the primary role of government, which is to provide for the needs of the people.”¹²

However, we cannot force those countries that do not employ high-end aviation into doing so. The Air Force should not encourage aviation development solely in terms of its own capabilities or those of our country’s near peers. Instead, the most comprehensive, sustainable approach for our partners involves helping them develop their own attitude of air-mindedness. This enables them to reap the tangible benefits of aviation not only militarily but also in a way that legitimizes their central governments, assures their sovereignty, and encourages improvement in their economy, technology, education, and communications. Not without risk, this course of action demands significant buy-in from the relevant populations. Partner nations must appear to use air assets to benefit economic systems that support their people, an objective that will require significant effort from the Air Force: we must be prepared to support other US government agencies in their efforts to assist partner nations in developing their airpower capability and capacity. Although not always directly linked to foreign military air forces, such development originates in US national policy and security. A partner nation should *not* begin to create air-mindedness by acquiring combat platforms; rather, it should start with aviation infrastructure and education. Air-mindedness has the initial goal of expanding communication—an important result because it complies with much of what US strategy on IW hopes to accomplish.

Alignment of Aviation Enterprise Development with US Irregular Warfare Strategy

The Department of Defense defines IW as “a violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary’s power, influence, and will.”¹³ Struggles to influence popular will show that information, communication, and responsiveness repeatedly prove vital to success. A government bolstered by a strong aviation enterprise is better equipped to inform, support, and secure its population. In the twenty-first century, helping partner nations build an air-minded society is one of the best ways to spread and ensure good governance in their outlying areas.

US policy on IW usually consists of five IW activities—counterinsurgency, counterterrorism, foreign internal defense, stability operations, and unconventional warfare—but many other relevant IW activities other than those five exist.¹⁴ A common approach, which will produce greater efficiencies in a coherent and effective strategy for employing such activities, must inform the Air Force capabilities and capacities required to work with, through, and by our partner nations.¹⁵

AED offers this common approach for Airmen to advocate with policy makers regarding the role that US aviation resources play in assisting partner nations, including those developing countries that typically do not receive traditional security assistance. Just as Mitchell argued for a system of airdromes, regulation of aircraft, and properly administered public safety regulations, so can the Air Force offer our nation’s decision makers and component commanders AED capabilities to help a partner nation build its aviation infrastructure and increase its capacity for transportation, communication, and commerce in previously unattainable ways and in unreachable areas. Doing so, in turn, can allow for improved governance and supply capability to support theater se-

curity via air. Consequently, the tangible benefits to citizens will help create technological advancement as their air-mindedness grows. Air-minded societies tend to seek progress and freedom; additionally, they are more open and more likely to foster educational opportunities as well as scientific advancements. Air-mindedness propels a society towards a common core of communication and language, allowing it to contribute to greater market access and unrestricted logistical flow.

Air Force—Unique Capabilities for Aviation Enterprise Development and Beyond

The Air Force has made great strides in recent years to increase its ability to enable AED. Robust demand exists for the capabilities encompassed by the AED concept. The service has organized, trained, and equipped both special operations forces and general-purpose forces to meet these challenges, primarily through our security cooperation efforts—and it will continue to do so. Organizations such as the Air Advisor Academy increase the service's capacity to expertly assess, train, educate, advise, and assist partner nations. Furthermore, units such as Air Force Special Operations Command's 6th Special Operations Squadron and Air Mobility Command's mobility support advisory squadrons employ teams of expeditionary special operators and air advisors who build relationships with partner air forces and help them enhance their aviation capacity to better respond to their nation's needs.

Expanding globalization and complex, worldwide supply chains have prompted the emergence of an imperative: the Air Force must enlarge its AED capabilities and institutionalize the AED approach throughout its general-purpose forces. Through Air Force-led AED and adoption of an attitude of air-mindedness, our partners and their citizens can realize benefits in transportation, communication, and commerce via the air, even before successful transition to a military application of air-power occurs. Only by means of a strong foundation of developed avia-

tion enterprise can we expect successful, sustainable security within our partner nations.

Not every partner nation may want a changed mind-set towards aviation, and there are limitations to our capability to encourage partners to adopt air-mindedness. Some partner nations will see aviation—military aircraft in particular—only as a means to increase their prestige. However, given the current austere budget environment, we must smartly apply any expansion of AED capabilities to partners willing to establish a strong national core of aviation, prior to responding to any demand for high-end military aviation equipment. Referring to budget constraints, General Schwartz emphasized that “we would rather be a smaller, capable Air Force than one that is larger and not ready. . . . That’s the strategy we’re going to follow.”¹⁶ In line with this strategy, our Air Force should invest intelligently in AED for a small number of partner nations—those we can reasonably anticipate will embrace and incorporate air-mindedness. To do so, we must conduct a thorough study and evaluation of potential partners for development rather than offer blanket support for any nation that asks for funds.

In 1921 Billy Mitchell, a colonel at that time, wrote, “While [aviation] is still expensive and somewhat dangerous, this is being overcome every day; and it is increasingly evident that the future national defense, future predominance in commerce, and the future economical development of a country lie in the air.”¹⁷ In 2011 General Schwartz directed that the Air Force “focus on cultivating new partnerships that enhance our friends’ aviation enterprises and their ability to provide security.”¹⁸ We can best encourage security cooperation by offering AED, advocacy, and training to enhance the ability of willing partner nations to control the air, space, and cyberspace domains. An attitude of air-mindedness led to civilization’s advancement in the past and will lead to stability and good governance in the future. ★

Notes

1. School of Advanced Airpower Studies, *The Paths of Heaven: The Evolution of Airpower Theory*, ed. Col Phillip S. Meilinger (Maxwell AFB, AL: Air University Press, 1997), 3.
2. William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military* (Tuscaloosa, AL: University of Alabama Press, 2009).
3. Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, February 2010), 26, <http://www.defense.gov/qdr/qdr%20as%20of%2029jan10%201600.PDF>.
4. Mitchell, *Winged Defense*, 119.
5. Ibid., 3.
6. William Mitchell, *Our Air Force: The Keystone of National Defense* (New York: E. P. Dutton, 1921), 157–58.
7. “USAF Air Advising Operating Concept,” draft, 21 November 2011, 8.
8. Barack Obama, *National Security Strategy* (Washington, DC: White House, May 2010), 26, http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.
9. Department of Defense, *National Defense Strategy* (Washington, DC: Department of Defense, June 2008), 8, <http://www.defense.gov/news/2008%20national%20defense%20strategy.pdf>.
10. “US Air Force Irregular Warfare Tiger Team: Observations and Recommendations,” 22 May 2009, ii.
11. Mitchell, *Winged Defense*, ix.
12. “Irregular Warfare Tiger Team,” 3.
13. Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 8 November 2010 (as amended through 15 October 2011), 175, http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.
14. See Department of Defense Directive 3000.07, *Irregular Warfare*, 1 December 2008, <http://www.dtic.mil/whs/directives/corres/pdf/300007p.pdf>.
15. See Department of Defense Instruction 5000.68, *Security Force Assistance (SFA)*, 27 October 2010, <http://www.dtic.mil/whs/directives/corres/pdf/500068p.pdf>.
16. A1C Bahja J. Jones, “CSAF Addresses Key Air Force Issues at JBA,” *Air Force Print News Today*, 4 November 2011, http://www.andrews.af.mil/news/story_print.asp?id=123278676.
17. Mitchell, *Our Air Force*, 222–23.
18. Gen Norton A. Schwartz, “CSAF Vector 2011,” 4 July 2011, <http://www.af.mil/shared/media/document/AFD-110703-001.pdf>.



Maj Chris Wachter, USAF

Major Wachter (USAF; MA, American Military University; MAAS, Air University) is chief of the Irregular Warfare Concepts Branch for the director of operations, Headquarters US Air Force, Washington, DC. He is responsible for developing strategy, plans, and policy to organize, train, and equip Air Force air, space, and cyberspace forces for irregular warfare. A B-1 instructor pilot who has flown combat missions in Operation Southern Watch, Operation Enduring Freedom, and Operation Iraqi Freedom, he previously served as the assistant director of operations for the 77th Weapons Squadron, US Air Force Weapons School (USAFWS). Major Wachter is a graduate of the USAFWS, Squadron Officer School, Army Command and General Staff College, and the Air Force School of Advanced Air and Space Studies.

Let us know what you think! Leave a comment!

Distribution A: Approved for public release; distribution unlimited.

Disclaimer

The views and opinions expressed or implied in the *Journal* are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government.

This article may be reproduced in whole or in part without permission. If it is reproduced, the *Air and Space Power Journal* requests a courtesy line.

<http://www.airpower.au.af.mil>